



NAR-SOAR First Quarter Meeting
Hawaii Prince Hotel
November 13-14, 2003

Tony Wylie opened the meeting and welcomed the participants. Tony invited Don Ossinger to discuss ALT activities. Don opined that organizational changes will impact the work we do and we should be attentive to upcoming announcements from headquarters. Changes to the organization with the rollout of the ATO may have potential effects on structure and chain of command due to reorganization into sub business units such as enroute, oceanic, and terminal.

New issues will be ahead of us that include spectrum band and data link. Don commented about the positive direction and positive relations between management and labor. We can't lose our motivation.

Regional Project Updates were provided by the regional representatives.

Charlie Montgomery and Michael Silvestre briefed on current Gulf of Mexico (GOM) airspace issues and outlined the Gulf operations at ZHU. A significant operational concern is limited radar surveillance along with limited and intermittent communications. The area of limited radar coverage and communications that deserves the greatest attention is the southeast portion of the ZHU Gulf. Currently, the ZHU Gulf is not exclusionary or MNP airspace.

Traffic growth is impacting operations. January 2003 traffic was 12.3% higher than January 2002. The largest impact to growth was the southeast corner between ZMA, ZHU and MID where there was a 20.6% increase in traffic. Over the last 3 years, traffic for March was as much as 75% greater than the traffic for September. Indications are for more traffic growth transitioning through the Gulf.

There is a strong desire from customers to develop an east – west route across the northern part of the GOM, south of the current Q routes. Potential routings to and from Cuba would be necessary through this airspace as well, if service to Cuba becomes a reality.

The NAR-SOAR chartered project concerning airspace changes in the GOM was divided into two portions. The first portion was implemented on June 1, 2003. Flights in the affected area can now deviate in excess of forty miles south of the Q- routes for weather avoidance while remaining under radar control of ZJX. This change limits closure of the Q routes which increases efficiencies for all customers in time and expense and decreases sector saturation which results when Q routes are closed and Q- route traffic diverted to overland routes.

The second portion of this plan will extend the control responsibility of Houston Center to the east. This will increase radar control for ZHU by assuming airspace that has existing radar coverage. This change will reduce the majority of manual coordination between ZMA and ZHU, and reduce the amount of back coordination between ZHU to ZMA and also ZHU to MID. The result is greater flexibility for customers and more timely response to customer requests. This change also establishes a foundation for future traffic growth and route expansion when communication, navigation and surveillance (CNS) technologies are further developed and implemented.

Planned implementation for the ZMA-ZHU boundary change is April 20, 2004. There are implementation concerns about the ability to establish the necessary Radar Sort Boxes (RSB)

for the existing radar coverage to be activated in the ZHU NAS. ZHU AOS has indicated they have limited programmer support and time to implement RSB Grid modifications.

Other operational items include methods ZHU will use to communicate with Havana and the need to establish a direct access voice line between ZHU-ZMA. Procedural items for an LOA between ZHU-ZMA will be developed from the LOI.

The development of additional north-south routes through the GOM is a NAR-SOAR chartered project. It is likely that this project will become more long-term in nature. Due to international negotiations and technology developments, the project will have to be developed over a time period in excess of three or more years.

Other current efforts in the GOM were briefed. The Boeing modeling efforts concerning the GOM are centered on four concepts. The models are intended to determine the value of capacity and constraints of the GOM for the customers, quantify the capacity and delay constraints in the GOM, design and build an optimal altitude baseline and design and build a non-optimal altitude baseline.

The Boeing models did not measure the level of controller tasks required to provide air traffic services such as flight plan coordination, data entry, data management, maintaining situational awareness, control and movement messages, and service limitations based on levels of work and procedural requirements.

In November 2003, Boeing conducted test flights in the GOM primarily to demonstrate an ability to provide a Global Communications, Navigation, and Surveillance System (GCNSS). Mitigation of NAS system limitations coupled with system capacity increases are the driving forces of these products. GCNSS ATC services are expected by Boeing to be available by 2015.

The purpose of the flights was to demonstrate digital voice via broadband and narrowband Satellite Communications (SATCOM), demonstrate seamless transition between areas of radar and communications to areas of non-radar and limited communications, demonstrate a SATCOM network from aircraft to ground that can transmit Automatic Dependent Surveillance (ADS) data and demonstrate a subset of a Controller Pilot Data Link Capability (CPDLC) (Build 1) message set transmitted via a secure SATCOM network to ground-based demonstration displays

Other development efforts in the GOM are the Safe Flight 21 initiatives. The objective is to apply and/or develop ADS-B, multilateration and/or related technologies to meet customer needs in the enroute, off-shore, and oceanic environments with the end goal of NAS wide implementation. High altitude flight tests are planned to occur beginning in January 2004 and continue through March 2004.

ZHU is planning to implement RVSM in the GOM coincident with DRVSM and the ZHU FLT is working the project. There are concerns about participation from Mexican ATC Facilities and a backup plan for GOM RVSM implementation will include a process to manage flights if Mexico does not participate.

We entered into a brief discussion about procedural issues in the GOM and the subject was tabled since as it was related to other agenda issues already scheduled.

All SAOR projects were affected by budgeting concerns. Budgets for FY-2004 were reduced by 15 percent. In FY-2004, NAR resources for the two GOM projects are \$54,120.

Pete Hruz briefed on activities in the northeast. The North Atlantic Air Traffic Management Group met in Paris from September 23 through 27, 2002.

The Group addressed difficulties that NAT airspace users were encountering because of airspace restrictions and air traffic flow measures being imposed in both the European (EUR) and North American (NAM) Regions. These restrictions result in additional costs to the users as well as difficulties in ensuring their on-time arrival needs in order to make sure that passengers could meet connecting flights

The group began exploring ways to improve the current procedures related to the development and promulgation of the Organized Track System (OTS) itself. The group

recognized that the problems were not directly related to the NAT Region itself but were tributary to the problems in the EUR and NAM Regions.

In order to resolve some of the issues it was strongly suggested that a more co-operative decision-making process be employed when establishing the OTS. The OTS has served the NAT user community well but it lacks the flexibility to respond to user requirements as it has in the past.

Presently the concept of Minimum Time Track (MTT) is being utilized, whereby tracks are created solely based on wind data. A new concept being pursued is the Minimum Cost Track (MCT). The MCT would take into consideration: wind data, known and forecast areas of turbulence, restricted airspace, planned airport delay data and user preferred routing for all segments of flight – both domestic and oceanic (end to end planning). This change would be accomplished with the introduction of a collaborative decision making mechanism, that would include input from/to the major NAT service providers, ATFM units (air traffic flow management), and airline operators.

This plan will be a phased approach with the core of the project planned for early-mid 2005. This project is expected to require reviews and modifications throughout its life. Service providers are more and more influential in the financial integrity of our customers and we must be more attentive to their problems and be part of the overall solution.

The most significant deliverable expected will be the creation, development and constant modification of a collaborative web site maintained by NavCanada. This site will be provided to the NAT stakeholders (service users/service providers/traffic flow units). The site would provide eastbound and westbound track listing information, SIGMETs, PIREPS and NOTAMS. A collaboration page would be activated for 1 hour during a predetermined timeframe during the track development process. The web site would be developed and implemented in a phased approach as different elements of the site become available. Customers operating or planning to operate on the tracks can also view track loading in order to modify flight plans if a benefit could be gained by changing to a different track.

Although this is not a truly SOAR developed project, SOAR affiliated personnel and expertise have become an integral component to the success of this endeavor. The ZHU NAR FLT postulated that something similar could be accomplished for the GOM.

Tony briefed on AAL and ALT activities. Almost all SOAR activity is in suspense in the AAL region due to implementation activities of Advanced Technologies and Oceanic Procedures (ATOP). Tony stressed that regional managers should not be surprised by national press releases; keep everyone in the loop. Joe White will manage the process from the headquarters level. Any meetings that include public forums need to be published in the Federal Register. The return on investment for Oceanic projects is currently valued at two dollars of return for each one dollar invested.

Implementation of CAR routes between ZNY and ZMA has been delayed. Many other countries like the idea and want to participate in conjunction with the U.S. However, ZMA is having automation issues including difficulty with automation and flight data interface, LOA and ICAO coding issues with Mexico, Cuba, Haiti, Puerto Rico and many other countries.

Dave Maynard and Danny Skolnick provided an update for Western Pacific activities which included the NAR-SOAR Projects concerning ZOA's Oceanic Gateway Project and ATOP implementation.

The number of Gateway Fixes to the Pacific was increased in the SFO area from 6 to 16 and in the LAX area from 6 to 13. This was accomplished by application of RNP-10 using 15-degree divergence to 50 nm instead of the standard 100 nm. ZOA was also able to maximize the use of expanded radar coverage obtained by modifying RSBs in the areas. The expected result is to achieve fuel and time savings due to the added flexibility in generating the PACOTS tracks and allow aircraft to attain their optimum altitude sooner. This project was implemented on September 4, 2003 and customer feedback has been positive.

Ocean21 is an ICAO compliant flight data processing (FDP) system. It will be incorporated into the ATOP system and provide a multitude of functions such as System-maintained electronic flight data, Controller Pilot Data Link Communications (CPDLC), Air Traffic Services Inter-facility Data Communications (AIDC) and Automated conflict detection. Additionally the system will have Automatic Dependent Surveillance (ADS), Workload Management Tools and a Radar Data Processor (RDP). Ocean21 allows controllers to focus on providing service to customers rather than manual and paper strip-based tasks.

Implementation of ATOP/Ocean21 will eventually allow for faster response times, enhanced search and rescue, customer preferred routes and distance separation versus time-based separation.

The current plan is to expedite implementation of the Ocean 21 system at all three Operational Sites by delivering functionality in Phases. The Factory Acceptance Test (FAT) occurred on July 25, 2003. The Government Acceptance (GA) at the Tech Center occurred on July 31, 2003. The System Test began the week of November 9th. The Site Acceptance Test (SAT) for ZOA is scheduled to begin in January 2004. AT Training will start after completion of System Test.

Leslie Carey (ATP-130 Office) had two issues for the NAR-SOAR Group. The IATA has requested that the US facilities work with Caribbean and Latin American AT service providers to provide RNAV tie-in routes. Customers have been able to formally modify routes utilizing RNAV and/or receive approval for routing changes on a daily basis from ATC south of US controlled airspace. Some of these routes have been formalized and approved by ICAO. These routes stop at US controlled airspace. It is the desire of the customers that the FAA tie into these routes and extend them into U.S. controlled airspace. Mexico is also anxious to add more routes through the GOM. Current procedures and rules in the GOM limit the ability to meet these desires of the customers at this time. A SOAR Charter will be developed to work this issue after RVSM implementation. ZHU will have significant involvement in this issue. A depiction of the routes is attached.

Leslie also discussed that obtaining the ability to utilize RNP-4 was realistic for the GOM. ATP-130 is planning to work towards RNP-4 for the GOM after RVSM. RNP-4 would allow the use of 30 NM lateral and 30 NM longitudinal separation standards.

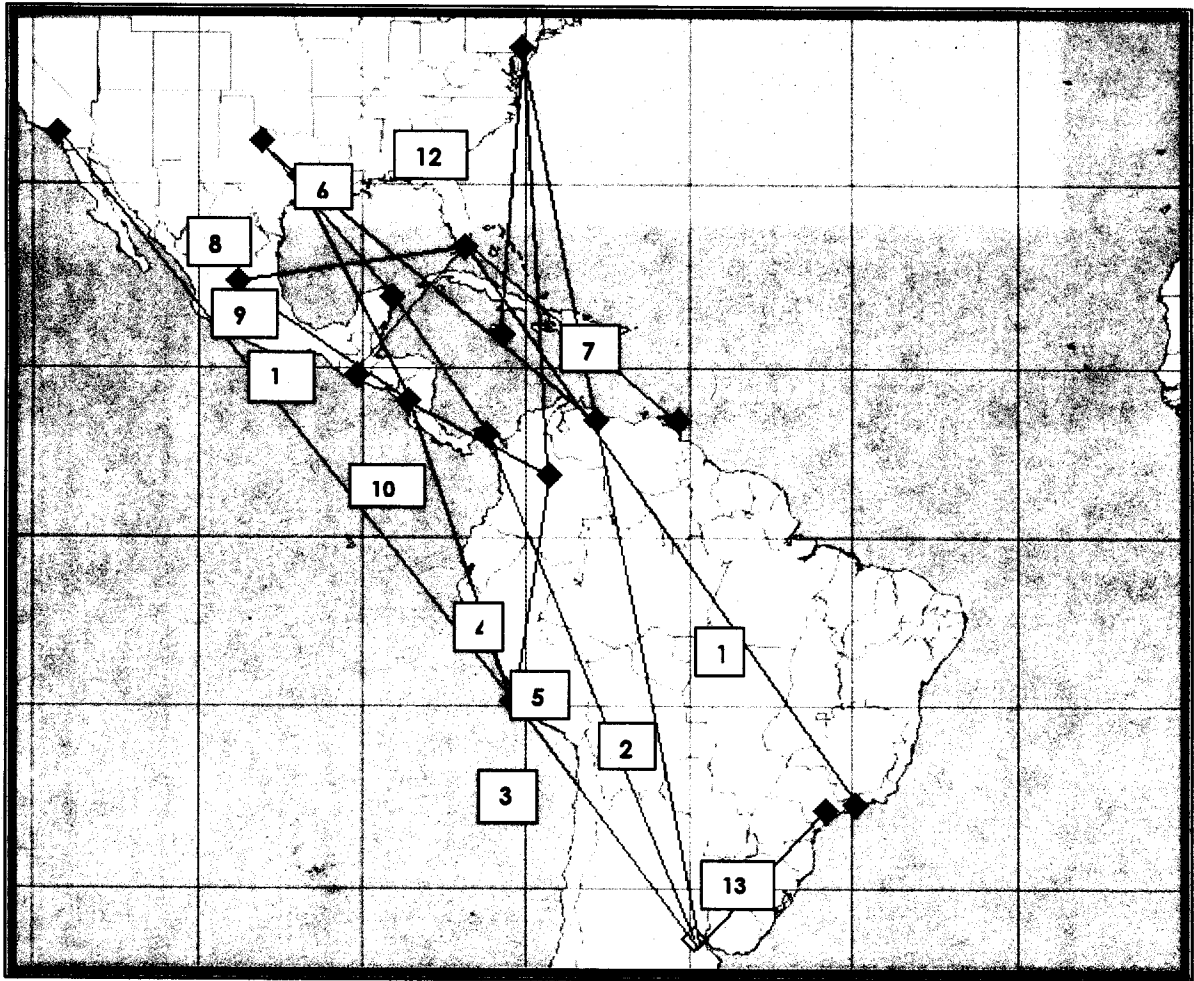
Lee Brown (MITRE) briefed that most domestic NAR activities will likely take place at the Command Center or possibly the Aeronautical Center in Oklahoma City. It is expected that logistical problems and greater financial expense will occur with this arrangement. She expressed that 520's would need to comment about the benefits versus the problems with this arrangement concerning costs, process, and logistics.

The group had a few issues in close out discussions. Specific request from customers need to be directed to the ALT. If an issue is brought to any level below that, it should be brought to the attention of the ALT to make a determination if the issue should be tasked. The workgroups are tasked from above and not by customers. The concern is information sharing and how to include customers at the local level without leading them to believe they are dealing directly with the authority over the issue at hand. Mention was made of the Code of Federal Regulations (CFR's) dealing with conflict of interest and customers' interaction with working groups.

The group had input in the development of a SOAR logo. Following that, the meeting schedule for FY-2004 was tentatively set for January 26, 2004, May 24, 2004 and August 16, 2004.

Charles Montgomery, ZHU NAR-FLT Management
Michael Silvestre, ZHU NAR-FLT NATCA

CARSAM Route Concepts



Nº	Designator	Trajectory	FIRs
1	UL 424 (*)	Río de Janeiro/Miami (*)	Brasilia, Manaus, Maiquetía, Curacao, Port-au-Prince, Habana, Miami.
2	UL 793	Buenos Aires/New York	Ezeiza, Resistencia, Asunción, La Paz, Porto Velho, Manaus, Maiquetía, Curacao, Santo Domingo, San Juan, Miami Oceanic, New York.
3	UL 777	Buenos Aires/Lima/Acapulco/Los Angeles	Ezeiza, Córdoba, Antofagasta, Lima, Guayaquil, América Central, Mérida, México, Mazatlán, Los Ángeles, Región NAM.
4	UL 670	Lima/Bogota/New York	Lima, Bogota, Barranquilla, Kingston, Port-au-Prince, Habana, Miami Oceanic, New York Oceanic.
5	UL 785	Buenos Aires/Panamá/Cancún/Dallas	Ezeiza, Córdoba, La Paz, Lima, Porto Velho, Guayaquil, Bogotá, Panamá, América Central, Mérida, Houston Oceanic.
6	UL 674	Caracas/Houston	Maiquetía, Curacao, Kingston, Habana, Miami Oceanic, Houston Oceanic.
7	UL 337	Puerto España/Miami	Piarco, Maiquetía, San Juan, Santo Domingo, Port-au-Prince, Miami Oceanic.
8	UL 208	Ciudad México/Miami	México, Mérida, Miami Oceanic.
9	UL 423	Bogotá / San José/Mexico City	Bogota, Panamá, América Central, Mérida, México.
10	UL 219	Lima / San José / Houston/Dallas	Lima, Guayaquil, Bogota, Panamá, América Central, Mérida, Houston Oceanic.
11	UL 471	San Salvador/Miami	América Central, Habana, Miami.
12	UL 583	Kingston/New York	Kingston, Habana, Miami Oceanic, New York Oceanic.
13	UL 527	Sao Paulo/Buenos Aires	Brasilia, Curitiba, Montevideo, Ezeiza.

(*) La ruta UL 304, Porto (PCX)– Great Inagua (ZIN), ya existe en el ANP CAR/SAM. El tramo PCX-Cabo Codera (CBC) VOR/DME ya ha sido implantado. Se requiere implantar el tramo CBC-ZIN para completar toda la ruta.

(*) The route UL 304, Porto (PCX)– Great Inagua (ZIN), already exists in the ANP CAR/SAM. The segment PCX-Cabo Codera (CBC) VOR/DME has already been implemented. The implementation of the segment CBC-ZIN is required to complete the whole route.